## **Count and Say** (View)

The **count-and-say** sequence is a sequence of digit strings defined by the recursive formula:

- countAndSay(1) = "1"
- countAndSay(n) is the way you would "say" the digit string from countAndSay(n-1), which is then converted into a different digit string.

To determine how you "say" a digit string, split it into the **minimal** number of substrings such that each substring contains exactly **one** unique digit. Then for each substring, say the number of digits, then say the digit. Finally, concatenate every said digit.

For example, the saying and conversion for digit string "3322251":

Given a positive integer n, return the new term of the **count-and-say** sequence.

## **Example 1:**

```
Input: n = 1
Output: "1"
Explanation: This is the base case.
```

## Example 2:

```
Input: n = 4
Output: "1211"
Explanation:
countAndSay(1) = "1"
countAndSay(2) = say "1" = one 1 = "11"
countAndSay(3) = say "11" = two 1's = "21"
countAndSay(4) = say "21" = one 2 + one 1 = "12" + "11" = "1211"
```

## **Constraints:**

• 1 <= n <= 30